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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,800	01/26/2004	Marcus F. Fontoura	SVL920030118US1	9771
47069	7590	10/11/2006	EXAMINER	
KONRAD RAYNES & VICTOR, LLP			ALI, MOHAMMAD	
ATTN: IBM54			ART UNIT	PAPER NUMBER
315 SOUTH BEVERLY DRIVE, SUITE 210				2166
BEVERLY HILLS, CA 90212			DATE MAILED: 10/11/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/764,800	FONTOURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mohammad Ali	2166	

All participants (applicant, applicant's representative, PTO personnel):

(1) Mohammad Ali. (3) \_\_\_\_\_.

(2) Janaki K. Davda (RN: 40,684). (4) \_\_\_\_\_.

Date of Interview: 04 October 2006.

Type: a) Telephonic b) Video Conference  
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: Call.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant's representative explained the invention and prior art. 101 issues had discussed and by proposed amendment the issues might overcome. After receiving the amendment further search will be conducted and another office action will follow-up.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



Examiner's signature, if required

## Summary of Record of Interview Requirements

**Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record**

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**KONRAD RAYNES & VICTOR, LLP**

*315 S. Beverly Drive, Suite 210  
Beverly Hills, California 90212*

*Telephone: (310) 556-7983  
Facsimile: (310) 556-7984*

**FAX COVER SHEET****PLEASE DELIVER THIS FACSIMILE  
TO EXAMINER MOHAMMAD ALI**

TO: Commissioner for Patents  
Attn: Examiner Mohammad Ali  
Group Art Unit 2166  
Patent Examining Corps  
Facsimile Center  
Alexandria, VA 22313

FROM: Janaki K. Davda  
OUR REF: 0056.0020  
TELEPHONE: 310-556-7983

Total pages, including cover letter: 12

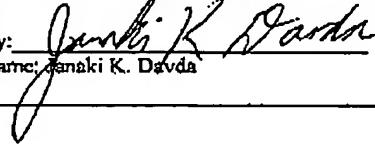
**PTO FAX NUMBER 1-571-273-4105**

If you do NOT receive all of the pages, please telephone us at 310/556-7983, or fax us at 310/556-7984.

Description of Documents Transmitted: INFORMAL/DRAFT COMMUNICATION- DO NOT ENTER INTO PROSECUTION RECORD; PROPOSED AGENDA FOR INTERVIEW

Applicant: M.F. FONTOURA et al.  
Serial No.: 10/764,800  
Filed: January 26, 2004  
Group Art Unit: 2166  
Docket No.: SVL920030118US1

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on September 29, 2006

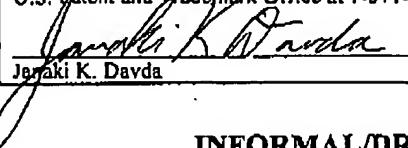
By:   
Name: Janaki K. Davda

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	M.F. FONTOURA et al.	Examiner	Mohammad Ali
Serial No.	10/764,800	Group Art Unit	2166
Filed	January 26, 2004	Docket No.	SVL920030118US1
TITLE	ARCHITECTURE FOR AN INDEXER		

CERTIFICATE UNDER 37 CFR 1.8:

I hereby certify that this correspondence is being transmitted by facsimile to Mohammad Ali of the U.S. Patent and Trademark Office at 1-571-273-4105 on September 29, 2006.

  
Janaki K. Davda

INFORMAL/DRAFT COMMUNICATION -  
DO NOT ENTER INTO PROSECUTION RECORD:  
PROPOSED AGENDA FOR INTERVIEW

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Examiner:

This agenda is being submitted prior to a telephone interview.

The tentative participants are Examiner Ali and Janaki K. Davda.

The proposed date of interview is Wednesday, October 4, 2006. The proposed time is 2:00 p.m. (EST).

A telephone interview is requested.

No exhibit will be shown.

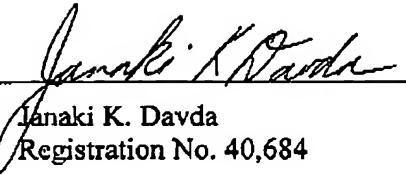
Dated September 29, 2006

Serial No. 10/764,800  
Docket No. SVL920030118US1  
Firm No. 0056.0020

Applicants would like to discuss the claims as amended in the amendment filed on September 29, 2006, a copy of which is attached.

Dated: September 29, 2006

By:

  
Janaki K. Davda  
Registration No. 40,684

Please direct all correspondences to:

Janaki K. Davda  
Konrad Raynes & Victor, LLP  
315 South Beverly Drive, Ste. 210  
Beverly Hills, CA 90212  
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Fax: 310-556-7984

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	M.F. FONTOURA et al.	Examiner	Mohammad Ali
Serial No.	10/764,800	Group Art Unit	2166
Filed	January 26, 2004	Docket No.	SVL920030118US1
TITLE	ARCHITECTURE FOR AN INDEXER		

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**CERTIFICATE UNDER 37 CFR 1.8:**

I hereby certify that this correspondence is being transmitted through the USPTO EFS-Web system over the Internet to Mohammad Ali of the U.S. Patent and Trademark Office on September 29, 2006.

/Janaki K. Davda/  
Janaki K. Davda

AMENDMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Amendments to the Specification begin on page 2.

Amendments to the Claims are reflected in the listing of claims which begins on page 3.

Remarks/Arguments begin on page 8.

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Reply to Office action of June 29, 2006

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**Amendments to the Specification**

Please change the title to the following:

**ARCHITECTURE FOR AN INDEXER  
WITH FIXED WIDTH SORT AND VARIABLE WIDTH SORT**

Amndt. dated September 29, 2006  
Reply to Office action of June 29, 2006

Serial No. 10/764,800  
Docket No. SVL920030118US1  
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This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (Original) A method for indexing data, comprising:  
receiving a token;  
determining whether a data field associated with the token is a fixed width;  
when the data field is a fixed width, designating the token as one for which fixed width sort is to be performed; and  
when the data field is a variable length, designating the token as one for which a variable width sort is to be performed.
2. (Original) The method of claim 1, wherein the token is variable width and further comprising:  
transforming the variable width token into a fixed width token.
3. (Original) The method of claim 1, further comprising:  
performing a fixed width sort on one of dual code paths and a variable width sort on the other of dual code paths.
4. (Original) The method of claim 1, further comprising:  
generating a sort key that includes a token type, a token, a document identifier, a document section, and an offset in a document.
5. (Original) The method of claim 1, further comprising:  
receiving different sections of a document at different times.
6. (Original) The method of claim 5, wherein the different sections include a context section and an anchor text section.
7. (Original) The method of claim 1, further comprising:

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generating sort keys for each token of multiple tokens; and  
using the sort keys to create posting lists that simultaneously are ordered by token and by  
document identifier for each token.

8. (Original) The method of claim 7, further comprising:  
using the sort keys to bring together multiple sections of a document.

9. (Original) The method of claim 1, further comprising:  
sorting on certain bits of a sort key containing multiple bits.

10. (Original) The method of claim 9, further comprising:  
sorting on uppermost bits of the sort key.

11. (Original) A computer system including logic for indexing data, comprising:  
receiving a token;  
determining whether a data field associated with the token is a fixed width;  
when the data field is a fixed width, designating the token as one for which fixed width  
sort is to be performed; and  
when the data field is a variable length, designating the token as one for which a variable  
width sort is to be performed.

12. (Original) The computer system of claim 11, wherein the token is variable width  
and wherein the logic further comprises:  
transforming the variable width token into a fixed width token.

13. (Original) The computer system of claim 11, wherein the logic further comprises:  
performing a fixed width sort on one of dual code paths and a variable width sort on the  
other of dual code paths.

14. (Original) The computer system of claim 11, wherein the logic further comprises:

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generating a sort key that includes a token type, a token, a document identifier, a document section, and an offset in a document.

15. (Original) The computer system of claim 11, wherein the logic further comprises: receiving different sections of a document at different times.

16. (Original) The computer system of claim 15, wherein the different sections include a context section and an anchor text section.

17. (Original) The computer system of claim 11, wherein the logic further comprises: generating sort keys for each token of multiple tokens; and using the sort keys to create posting lists that simultaneously are ordered by token and by document identifier for each token.

18. (Original) The computer system of claim 17, wherein the logic further comprises: using the sort keys to bring together multiple sections of a document.

19. (Original) The computer system of claim 11, wherein the logic further comprises: sorting on certain bits of a sort key containing multiple bits.

20. (Original) The computer system of claim 19, wherein the logic further comprises: sorting on uppermost bits of the sort key.

21. (Currently Amended) An article of manufacture comprising one of hardware logic and a computer readable medium including a program for indexing data, wherein the hardware logic or program causes operations to be performed, the operations comprising:  
receiving a token;  
determining whether a data field associated with the token is a fixed width;  
when the data field is a fixed width, designating the token as one for which fixed width sort is to be performed; and

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when the data field is a variable length, designating the token as one for which a variable width sort is to be performed.

22. (Original) The article of manufacture of claim 21, wherein the token is variable width and wherein the operations further comprise:

transforming the variable width token into a fixed width token.

23. (Original) The article of manufacture of claim 21, wherein the operations further comprise:

performing a fixed width sort on one of dual code paths and a variable width sort on the other of dual code paths.

24. (Original) The article of manufacture of claim 21, wherein the operations further comprise:

generating a sort key that includes a token type, a token, a document identifier, a document section, and an offset in a document.

25. (Original) The article of manufacture of claim 21, wherein the operations further comprise:

receiving different sections of a document at different times.

26. (Original) The article of manufacture of claim 25, wherein the different sections include a context section and an anchor text section.

27. (Original) The article of manufacture of claim 21, wherein the operations further comprise:

generating sort keys for each token of multiple tokens; and  
using the sort keys to create posting lists that simultaneously are ordered by token and by document identifier for each token.

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28. (Original) The article of manufacture of claim 27, wherein the operations further comprise:

using the sort keys to bring together multiple sections of a document.

29. (Original) The article of manufacture of claim 21, wherein the operations further comprise:

sorting on certain bits of a sort key containing multiple bits.

30. (Original) The article of manufacture of claim 29, wherein the operations further comprise:

sorting on uppermost bits of the sort key.

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#### REMARKS/ARGUMENTS

Claims 1-30 are pending in the application. Claim 21 has been amended. Reconsideration is respectfully requested. Applicant submits that the pending claims 1-30 are patentable over the art of record and allowance is respectfully requested of claims 1-30.

The title of the invention is objected to. Applicants have amended the title to overcome the objection.

Claims 21-30 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Applicants respectfully traverse, but, to expedite prosecution, Applicants have amended claim 21 to an article of manufacture comprising one of hardware logic and a computer readable medium including a program for indexing data, wherein the hardware logic or program causes operations to be performed. For example, the Specification, on page 19, paragraph 65 states:

The term "article of manufacture" as used herein refers to code or logic implemented in hardware logic (e.g., an integrated circuit chip, Programmable Gate Array (PGA), Application Specific Integrated Circuit (ASIC), etc.) or a computer readable medium, such as magnetic storage medium (e.g., hard disk drives, floppy disks,, tape, etc.), optical storage (CD-ROMs, optical disks, etc.), volatile and non-volatile memory devices (e.g., EEPROMs, ROMs, PROMs, RAMs, DRAMs, SRAMs, firmware, programmable logic, etc.). Code in the computer readable medium is accessed and executed by a processor.

Claims 1-30 are rejected under 35 U.S.C. 102(a) as being anticipated by Charles G. Call (U.S. Pub. No. 2002/0165707). Applicants respectfully traverse.

Claims 1, 11, and 21 describe receiving a token and determining whether a data field associated with the token is a fixed width. When the data field is a fixed width, the token is designated as one for which fixed width sort is to be performed. When the data field is a variable length, the token is designated as one for which a variable width sort is to be performed.

On the other hand, paragraph 10 of the Call patent application indicates that it is a further object of the invention to store variable length character data in an addressable array of integer

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values organized to permit more efficient execution of processing functions of the type typically performed by data processors. Paragraph 26 of the Call patent application describes that the apparatus and methods represent natural language text in more compact form as an array of fixed length binary integers that may be more rapidly searched, sorted and processed. Because the Call patent application represents text as an array of fixed length binary integers, there is no need for the claimed fixed width sort and variable width sort. Thus, the Call patent application does not anticipate claims 1, 11, and 21.

Dependent claims 2-10, 12-20, and 22-30 incorporate the language of independent claims 1, 11, and 21 and add additional novel elements. Therefore, dependent claims 2-10, 12-20, and 22-30 are not anticipated by the Call patent application for at least the same reasons as were discussed with respect to claims 1, 11, and 21.

#### Conclusion

For all the above reasons, Applicant submits that the pending claims 1-30 are patentable over the art of record. Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 09-0460.

The attorney of record invites the Examiner to contact her at (310) 553-7973 if the Examiner believes such contact would advance the prosecution of the case.

Dated: September 29, 2006

By: \_\_\_/Janaki K. Davda/\_\_\_\_\_

Janaki K. Davda  
Registration No. 40,684

Please direct all correspondences to:

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